The following listing of claims will replace all prior version, and listing of claims, in this application.

## Listing of the claims:

Claims 1-5 (canceled).

- 6. (Previously amended) The method of claim 38, wherein a human hematopoeitc cell composition enriched in human T-cells is cultured.
- 7. (Previously amended) The method of claim 38, wherein the culture medium is continuously perfused at a ramped rate proportional to the lactate concentration and/or cell density to replace the culture medium without substantial dilution of the cell density.
- 8. (Previously amended) The method of claim 38, wherein the culture medium is replaced at rate of from 50% to 100% daily replacement for a cell density of from  $1x10^4$  to  $1x10^7$  cells per ml of culture.

Claim 9 (Canceled).

- 10. (Previously amended) The method of claim 38, wherein the cells are cultured for at least 2 days.
- 11. (Previously amended) The method of claim 38, wherein the culture medium contains at least 1 growth factor which stimulates the proliferation of the cells.
- 12. (Previously amended) The method of claim 38, wherein the cultured lineage committed human cells have enhanced replicative potential.

Claims 13-37 (canceled).

38. (Currently amended) A method for obtaining lineage committed human cells with enhanced biological function comprising culturing <u>a</u> lineage committed human <u>hematopoietic</u> cell composition, wherein the lineage committed human cells are differentiated to at least a

point where they are programmed to develop into a specific type of cell eells under physiologically acceptable liquid culture conditions, said conditions including replacement of a liquid culture medium at a rate of at least 25% daily replacement continuously for more than one day and for a time sufficient to obtain human lineage committed hematopoietic cells with enhanced biological function, wherein said enhanced biological function is relative to the biological function of the lineage committed human hematopoietic cells that are cultured in a static culture; and wherein the lineage committed human cells are more differentiated than human stem and progenitor cells.

- 39. (Original) The method of claim 38, wherein the biological function enhanced in the cultured cells comprises at least one member selected from the group consisting of secretion of substances, cell-cell communication, receptor expression on the cell surface, cytolysis, antigen presentation, antigen processing, ability to home *in vivo* to sites for function, and the ability to proliferate leading to development/regeneration of tissue similar to naturally occurring structure/function.
- 40. (Currently Amended) The method of claim 38, wherein the biological function enhanced in the isolated lineage committed human <u>hematopoietic</u> cells comprises increased release of cytokines.
- 41. (Currently Amended) The method of claim 38, wherein the biological function enhanced in the isolated lineage committed human <u>hematopoietic</u> cells comprises increased cytolytic activity.
- 42. (Previously Amended) The method of claim 38, wherein the human lineage committed <u>hematopoietic cell composition eells further</u> comprise <u>hematopoietic cells</u>,

mesenchymal cells, keratinocytes, fibroblasts, hepatocytes, neural cells, epithelial cells, lymphocytes, osteoblasts or human osteoclasts.

Claim 43. (Canceled)

- 44. (Currently Amended) The method of claim 38, wherein the human lineage committed <u>hematopoietic cell composition comprises</u> [cells comprise] dendritic cells or non-myeloid mature cells which are other than stromal cells.
- 45. (Currently Amended) The method of claim 38, wherein the human lineage committed hematopoietic cell composition comprises [cells comprise] T-cells, dendritic cells or chondrocytes.

Claim 46. (Canceled)

Claims 47 and 48. (Canceled)